FOREST PRACTICES CODE

of

BRITISH COLUMBIA

Range Use Plan Guidebook

October 2000

BRITISH COLUMBIA

Authority:
Forest Practices Code of British Columbia Act
Operational Planning Regulation
Range Practices Regulation

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Preface

This guidebook has been prepared to help forest and range resource managers plan, prescribe and implement sound forest practices that comply with the Forest Practices Code.

Guidebooks are one of the four components of the Forest Practices Code. The others are the *Forest Practices Code of British Columbia Act*, the regulations and the standards. The ***Forest Practices Code of British Columbia Act*** is the legislative umbrella authorizing the Code's other components. It enables the Code, establishes mandatory requirements for planning and forest practices, sets enforcement and penalty provisions and specifies administrative arrangements. The **regulations** lay out the forest practices that apply province-wide. **Standards** may be established by the chief forester, where required, to expand on a regulation. Both regulations and standards are mandatory requirements under the Code.

Forest Practices Code guidebooks have been developed to support the regulations, but are not part of the legislation. The recommendations in the guidebooks are not mandatory requirements, but once a recommended practice is included in a plan, prescription or contract, it becomes legally enforceable. Guidebooks are not intended to provide a legal interpretation of the Act or regulations. In general, they describe procedures, practices and results that are consistent with the legislated requirements of the Code.

The information provided in each guidebook is used to help users exercise their professional judgment in developing site-specific management strategies and prescriptions designed to accommodate resource management objectives. Some guidebook recommendations provide a range of options or outcomes considered to be acceptable under varying circumstances.

Where ranges are not specified, flexibility in the application of guidebook recommendations may be required, to adequately achieve land use and resource management objectives specified in higher-level plans. A recommended practice may also be modified when an alternative could provide better results for forest resource stewardship. The examples provided in many guidebooks are not intended to be definitive and should not be interpreted as being the only acceptable options.

Contents

Preface iii
Introduction 1
Planning terminology 1
Range Use Plans 2
Plan content for grazing agreements 2
District manager responsibilities 2
Agreement holder responsibilities 9
Plan content for hay cutting agreements 10
Public participation and advertising 11
Approval of range use plans 14
Amendments to range use plans 14
Crown Range Developments 15
Review 15
Referrals 15
Layout 16
Authorization 16
Maintenance responsibilities 16
Amendments 16
Appendix 1: Range use plan template, amendment for and sample approval checklist 17
Appendix 2: A template of information provided by the district manager to the agreement holder 23
Appendix 3: A sample range use plan 25

Table 1: How goals, objectives, strategies, and measures may be applied in a range use plan 6

Introduction

This document is intended to provide guidance to forest and range managers in the developing of range use plans. It replaces the Range Management Guidebook 2nd edition, of September 1995. The *Range and Forest Practices Code* booklet and the *Range Use Plan Training* course, serve as companion tools to this guidebook. Additional requirements pertaining to these subjects may be found in provincial, regional or district policies and procedures.

Range use plans were restructured significantly in 2000. Previously plans included a mix of goals, objectives, strategies, and measures. Goals, objectives and strategies no longer form a part of the plan. They are provided to the rancher by the district manager as direction on how range is to be managed.

It is important for Ministry staff and agreement holders to understand the distinctions between goals, objectives, strategies, and measures. The following description is from the *Guide to Writing Resource Objectives and Strategies.*

Planning terminology

Goals describe a future vision and are worded to establish broad aims without a specific time-frame. They normally apply to a large planning area such as a Timber Supply Area (TSA) or Land and Resource Management Plan (LRMP).

Objectives outline end results that will achieve broader goals. They describe desired future conditions, and are measurable, time-specific and geographically specific.

Strategies describe how to achieve an objective, and pertain to an activity and how that activity is to be conducted. They can apply to entire district, to a range unit, to a specific agreement area, or to a portion of an agreement area. They may be time-specific and measurable.

Measures are the activities carried out by the agreement holder to achieve the specified strategies. These include livestock management practices such as salting, herding of livestock, construction of developments, prescribed burning, etc.

Range Use Plans

Range use plans are required for all *Range Act* grazing and haycutting agreements. This section describes range use plan content, district manager and agreement holder responsibilities, the requirements for public consultation, and advertising plan content, and provides examples of the information regarding range use to include in range use plans. Appendix 1 has a range use plan template (an electronic version of the range use plan template is under development), a plan amendment form and a plan approval checklist. Appendix 2 is template of information provided by the district manager. Appendix 3 is a sample range use plan.

In principle, range use plans should be no more complicated than dictated by the circumstances.

Plan content for grazing agreements

District manager responsibilities

The district manager will consider higher-level plan objectives when formulating strategies relating to the management of rangeland.

The district manager will provide the following information to the agreement holder. This information is kept on file at the Ministry of Forests district office and is available to parties reviewing the plan:

1. A map of appropriate scale showing the following:

(i) *Range Act* agreement boundaries

(ii) community watershed boundaries

(iii) known wildlife habitat areas

(iv) known ungulate winter range affected by livestock grazing or related activities

(v) resource features likely to be affected by livestock use (may include: snow courses; recreation features and facilities; wildlife habitat features; streams, wetlands, and lakes; research installation plots; domestic water intakes; cultural heritage resources)

(vi) sensitive areas

(vii) range developments

(viii) key areas

2. Locations of key areas

These are relatively homogenous portions of a range agreement area selected because of their location, use, or grazing value as monitoring sites that reflect the overall acceptability of current grazing management over the area.

The following will be provided:

(i) range readiness criteria indicating when the range is ready for grazing or harvesting based on a combination of soil moisture conditions and the phenological stage of plants. Leaf development stage in indicator grass species is the most reliable criterion.

(ii) average stubble heights and browse utilization levels. These are based on the height of the most palatable or preferred plant species remaining after harvesting either mechanically or by grazing animals and the percent usage of new woody shrub or hardwood tree growth

3. A description of any resource features (including streams, wetlands or lakes), sensitive areas and riparian areas that may be negatively affected by livestock use

(i) riparian areas and features that are non-functional or at risk

(ii) wildlife habitat features

(iii) other

4. Plant community descriptions in areas where livestock have, or may have, a significant effect including:

(i) Current plant communities (CPC)

The written descriptions should allow a person to visualize the plant community. The plant community should be described by layers (overstorey, understorey) and major plant species. Where possible, soil texture and terrain (aspect, slope and elevation) should be used to describe where certain communities occur in an area (e.g., in this range unit, dry south slopes are dominated by bluebunch wheatgrass/Rocky mountain fescue while moister north-facing slopes are dominated by porcupine grass and bluegrass, with minor amounts of blue-bunch wheatgrass). In most cases this can be done in a simple tabular form.

(ii) Desired plant communities (DPC)

The desired plant community is one that produces the kind, proportion, and amount of vegetation necessary for meeting or exceeding the stated objectives for the site. The DPC must be consistent with the site's capability to produce the vegetation through management, land treatment or a combination of the two. The DPC takes into account multiple values, such as economics, biodiversity, water quality, wildlife/fisheries, forage, and recreation.

As with the CPC description, the DPC should describe the plant community by layers and major plant species.

5. Strategies

(i) For ungulate winter ranges related to livestock grazing.

Ungulate winter ranges and objectives may be established by written order of the chief forester and the Deputy Minister of Environment, Lands and Parks or by a wildlife management plan or strategy approved before June 15, 1998.

Range use plans must give consideration to objectives for ungulate winter range. These objectives will be achieved through the application of an appropriate grazing schedule and correct stocking rate, correct utilization levels and residual cover and the use of range developments and livestock management.

(ii) To achieve biological diversity.

Landscape-level biodiversity objectives are set through the landscape unit planning process. In the absence of higher-level plans, consider the following concepts:

- managing livestock to achieve a DPC
- maintaining travel corridors and ecological linkages to ensure that livestock use does not cause significant unnatural cover breaks or isolation of species from their habitats or potential habitats

(iii) To protect resource features and/or sensitive areas.

Generally, features would be protected by controlling timing, levels and patterns of use and distribution. In some cases fences may be necessary.

(iv) To achieve or maintain properly functioning condition (PFC) in riparian areas.

Strategies should identify the need to restore damaged stream and riparian sections to PFC within a prescribed time period, restore riparian plant communities and maintain stable soils and banks.

PFC is achieved through the application of appropriate grazing schedules, utilization levels for key indicator species, and stocking rates, and the use of range developments and livestock management measures.

(v) To achieve the desired plant communities.

Strategies should identify the need to restore plant communities to their DPC within a prescribed time period. The following strategies may be used to achieve the DPC:

- Managing the levels of use for key plant species. This allows for species maintenance, reproduction and replacement.

- Managing the timing of use. The plan should allow plants time for growth, maintenance and reproduction. Often this is accomplished through planned periods of deferral or rest during the growing season.
- Managing the distribution of livestock use. Normally, managers try to achieve uniform distribution and levels of livestock use. For a variety of reasons (primarily physical landform, plant species palatability and animal grazing behaviour), small patches of over-use and non-use may occur. These patches may differ from the desired plant community, but typically are small enough individually and collectively so as not to affect the plant community at the landscape level or other values.

(vi) To achieve water quality objectives (if they exist).

Strategies should identify the need to: manage livestock use so that sedimentation and faecal contamination are reduced; prevent an accumulation of faecal material in the riparian area within one kilometre of the community water supply intake; limit foraging and loafing within the riparian area; and manage for a vigorous riparian plant community at a DPC within a prescribed time period.

(vii) Relating to Wildlife Habitat Areas.

The Chief Forester and the Deputy Minister of Environment, Lands and Parks or designate may jointly classify a species at risk as identified wildlife if they agree that the species needs to be managed through a higher level plan, wildlife habitat area or general wildlife measure. They may also establish an area of land as a wildlife habitat area (WHA) and may establish management practices (general wildlife measures) if satisfied that these are necessary to maintain these species and their habitats. General wildlife measures may apply to WHAs or to specific ecosystem units.

(viii) To minimize damage to trees that are not free growing.

Livestock grazing is used to remove competing grass and forb growth from plantations, but must not damage tree seedlings to a level so that the plantation fails to meet free growing conditions. Livestock management measures should complement measures taken by the forest licensee.

(ix) Other strategies

The district manager may require additional strategies to manage and conserve the resource in the plan area.
Table 1 gives examples of how goals, objectives, strategies, and measures might be applied in a range use plan.

Table 1. How goals, objectives, strategies, and measures may be applied in a range use plan.

Goal	Objective	Strategy	Measure
• A viable wild ungulate population within the unit	• Maintain the functional integrity of ungulate winter range • Maintain adequate browse and low hiding cover • Maintain an adequate fall standing crop of forage	• Use livestock to pre-condition forage on open grassland units • Plan grazing so the open grasslands have a fall standing crop of rough fescue in excess of ___ cm.	• Graze ___ cow/calf pairs for ___weeks (__ AUMs) • Livestock use will occur prior to _____ in order to allow forage plants to regrow • Distribute livestock use uniformly by active herding
• A healthy, natural ecosystem	• Maintain a natural level of biological diversity • Maintain a perennial bunchgrass community in open range areas • Maintain natural stand structure, and prevent unnatural cover breaks	• Manage timing, level and distribution of livestock use • Through a combination of grazing, chemical and biological control methods, limit the spread of noxious weeds	• Follow stated range readiness criteria when determining when spring livestock grazing is to occur on grasslands • Livestock grazing will not occur after _____ • Allow understorey plants to regrow prior to fall • Follow the grazing schedule and use level • Disturbed areas will be revegetated within ___ years
• A healthy, natural ecosystem	• Maintain and protect resource features/ sensitive areas	• Restore any damaged resource features within ___ years through livestock management and range developments	• Follow the grazing schedule and use level • Range developments

Goal	Objective	Strategy	Measure

• A healthy functioning watershed with intact riparian plant communities	• Maintain or achieve properly functioning condition in riparian areas	• Manage livestock use and plan range developments:
		  • so that damaged stream and riparian sections are restored to properly functioning conditions (PFC) within ___ years
		  • to restore a dense corridor of willow through natural recruitment along _____ Creek within ___ years
		  • to maintain stable soils and streambanks
		  • to prevent an accumulation of faecal material within the riparian area
		• Reduce livestock watering from creek
			• Livestock use will occur when soils are dried to point where they are not susceptible trampling and compaction
			• Livestock use will occur prior to _____ in order to prevent browsing of willow shoots
			• Remove livestock from the riparian portion of the unit when the average stubble height in the key area reaches ____ cm
			• Distribute livestock by daily herding and by placement of salt blocks. Salt blocks will be placed no closer than ____ m from the riparian area
			• Develop ___ off-stream water sites at _____

• A healthy natural ecosystem	• desired plant communities (DPCs) of conifer forest with an understorey of ____, and ___open grasslands of rough fescue	• Manage livestock use to:
		  • maintain a vigorous understorey of _____
		  • maintain a vigorous native perennial plant community in _____
		  • maintain the current plant community through appropriate timing and degree of use.
		  • achieve DPC within ___ years
			• Graze from ___ to ___
			• Manage to achieve a ___% level of use of current year's growth on average
			• Manage for an average stubble height of ___ cm in key areas
			• Will not exceed __ % use of current year's browse in ___ key areas

Goal	Objective	Strategy	Measure
• Clean drinking water	• Meet or exceed the Canadian Drinking Water Standards within ___ years	• Manage livestock use: • so that sedimentation and faecal contamination are reduced • to prevent an accumulation of faecal material within the riparian zone within 1 km of the community water supply intake • to limit foraging and loaf-ing within the riparian area • to achieve a vigorous riparian plant community at a DPC of _____ • to maintain or achieve PFC within __ years	• Follow a grazing schedule (season and duration of use) • Follow stated readiness criteria (soils and plant phenology) • Follow an appropriated level of use (livestock class, numbers and AUMs) • Follow stated use levels (stubble height) • Distribute livestock use through management (salting, herding, developments)
• A viable forest industry	• Achieve free growing conditions on newly planted cutblocks	• Manage livestock use so that they will not damage tree seedlings to the extent that the plantation fails to meet free to grow conditions • Manage livestock to limit trampling and browsing of conifer seedlings	• Will not salt within ___ m of plantations • Remove livestock from the unit when a stubble height of ___ is reached or prior to _____
• Prevention of wildlife extirpation	• Protect known habitats and populations of _____	• Defer spring grazing by livestock in identified waterfowl nesting areas • Manage livestock to maintain the current plant community of _____ and a spring grass cover of ____ cm on average. • Prevent disturbance around the rattlesnake hibernaculum	• Graze livestock in this unit from _____ to ____ • Manage for a stubble height of ____ in key area _____ • Build a fence to prevent livestock access in the immediate vicinity of the hibernaculum

Agreement holder responsibilities

The agreement holder must consider both the district manager–supplied strategies and any higher-level plan objectives when determining the grazing schedule and any measures or actions they will take to manage livestock on the rangeland. They may also comment on how other resource uses affect their ability to manage the range and may identify other issues.

The agreement holder will submit a range use plan[1] consisting of the following:

1. **A map of the area, provided by the Ministry of Forests**

2. **Measures to address strategies provided by the district manager including those relating to**

(i) ungulate winter range

(ii) achieving biological diversity

(iii) protecting resource features and/or sensitive areas

(iv) achieving or maintaining properly functioning condition (PFC) in riparian areas

(v) achieving des..ed plant communities (DPCs) in areas that have been, or may be, significantly affected by livestock use

(vi) addressing known water quality objectives

(vii) minimizing damage to trees that are not free growing

(viii) wildlife habitat areas (WHAs)

(ix) other

3. **A grazing schedule indicating livestock class and numbers, AUMs and periods of use by area. (Where private land is grazed in common, a grazing schedule must be supplied for the private land.)**

4. **The location of key areas along with readiness criteria, average stubble heights and browse use levels**

5. **An expiry date**

6. **Signature of the agreement holder (unless relieved of the obligation to prepare the plan)**

[1] Unless specifically relieved of the requirement to submit a plan by the district manager under section 27(2) of the *Forest Practices Code of British Columbia Act*. In this case, the district manager must prepare a range use plan.

Plan content for hay cutting agreements

District manager responsibilities

The district manager will consider higher-level plan objectives when formulating strategies relating to the management of rangeland.

The district manager will provide the following information to the agreement holder. This information is kept on file at the Ministry of Forests district office and is available to parties reviewing the plan:

1. A map of appropriate scale showing the following:

(i) *Range Act* agreement boundaries

(ii) community watershed boundaries

(iii) known wildlife habitat areas

(iv) known ungulate winter range likely to be affected by hay cutting

(v) resource features likely to be affected by hay cutting or related activities

(vi) sensitive areas

(vii) range developments

(viii) intended harvest area

2. A description of desired plant communities for the areas to be harvested

3. Strategies to achieve desired plant communities for the areas to be harvested

4. Range readiness criteria or other factors to determine the time of harvest

Agreement holder responsibilities

The agreement holder must consider both the district manager–supplied strategies and any higher-level plan objectives when preparing the range use plan.

The agreement holder will submit a range use plan[2] consisting of the following:

[2] Unless specifically relieved of the requirement to submit a plan by the district manager under section 27(2) of the *Forest Practices Code of British Columbia Act*. In this case the district manager must prepare the range use plan.

1. **A map of the area (provided by the Ministry of Forests)**
2. **A description of the desired plant communities and the measures to achieve them**
3. **An average stubble height for the area to be harvested**
4. **A date for the intended start of harvesting**
5. **Readiness criteria or other factors determining time of harvest (provided by the district manager)**
6. **An expiry date**
7. **Signature of the agreement holder (unless relieved of the obligation to prepare the plan)**

Public Participation and Advertising

Range use plans are subject to public consultation as outlined in the *Forest Practices Code of British Columbia Act* and associated regulations and standards. For complete details, refer to the ***Public Consultation Guidebook.*** The following provides additional information on the advertising of operational plans.

The person preparing the range use plan is responsible for the advertising and public viewing requirements. If, under the Act, the district manager exempts the range agreement holder from having to prepare the range use plan, the district manager then assumes the responsibilities for advertising and public viewing.

Advertising

Range use plans must be advertised to notify the public of opportunities for input. Requirements for public notice are established through regulations and standards.

Scope of advertising

Advertisements notifying the public of the opportunity to view range use plans should be placed in at least one newspaper circulating nearest to the area of the proposed plan.

Notification by radio is encouraged for remote areas where people such as trappers and guide/outfitters do not have access to local newspapers, government agents or forest district offices.

Time-frame for advertising

Proposed plans should be advertised at least one week prior to the first date on which they will be available for public viewing. Advertising should be carried out in such a way that it will reach as many of the affected parties as possible.

In accordance with the regulation, the public and affected parties should be given a minimum of 60 days to comment on proposed plans. However, the district manager may reduce the time period to 30 days where it is determined that the shorter period will provide an adequate opportunity for review and comment.

Advertising format

Range use plans could be advertised in the following format (minimum 3" x 5")

Proposed Range Use Plans

Notice is hereby given that _____ will make available for public viewing the following proposed range use plans _____

These plans contain the location of the grazing areas, proposed levels of use, grazing schedules that detail livestock numbers, nature and duration of use, and measures required to meet objectives and strategies for integrated resource management. They are available for review by resource agencies and the public before approval is considered by the Ministry of Forests.

These proposed range use plans will be made available for public viewing until _____ at _____ during the following hours _____

Your written comments must be made to _____ at _____ by the above-noted date to ensure consideration.

In addition to the information above, the newspaper advertisement should include the following:

- agreement holder name(s)
- indication of whether the plan is for a renewal or a new tenure
- indication of whether the plan is for a licence or permit, and the length of time it covers

Open houses

The district manager may hold an open house at the beginning of the review period where it is determined that there will be sufficient public interest in the

proposed plan(s), where the ministry prepared the plan(s) on behalf of the range agreement holder, or when several plans have been advertised at the same time.

Plans are to be displayed in a manner understandable to the public. Clear interpretations of all technical information should be available. As a minimum the following information should be provided:

- range agreement area
- purpose of the plan review
- agreement holder name(s)
- animal unit months (AUMs) or tonnes of hay
- whether the plan is for a renewal or a new tenure
- whether the plan is for a licence or a permit, and the length of time it covers

District manager–supplied strategies should accompany the plan.

Relevant information from the Ministry of Environment, Lands and Parks, such as habitat capability mapping for the plan area, should be available for public review.

A map of appropriate scale should be displayed, showing the location of range agreements, animal unit months, and agreement holder names for range use plans under review at that time.

Attendance record

Attendance should be recorded at each open house. Members of the public interested in being kept informed of proposed activities on an ongoing basis should be added to the mailing list at this time.

Public input

Public viewings are to aid the exchange of information between plan developers and people interested in, or affected by, range operations. To ensure that public input can be considered in plan development, comments must be submitted to the plan developer in writing

Referrals

The district manager may require referral of a range use plan or plan amendment to an agency or affected party. The normal referral period is 60 days; however, the district manager may reduce the period to 30 days where the shorter time period provides an adequate opportunity for review and comment.

The Ministry of Environment, Lands and Parks is a referral agency for all range use plans.

Response to comments

Comments received and a summary of any revisions made as a result of these comments must be submitted, with the proposed plan or amendment, to the district manager.

Approval of Range Use Plans

Before giving approval, the district manager will ensure that the range use plan submitted by the agreement holder adequately manages and conserves the range resource and addresses referral and review comments appropriately.

An Approval Form and a sample Approval Checklist are found in Appendix 1.

Amendments to Range Use Plans

Amendments to range use plans may be initiated by the agreement holder or may be required by the district manager (e.g., if a plan is unlikely to succeed, or because of special circumstances, or where the plan is inconsistent with new objectives, strategies or measures). Advertising and referral is normally required unless the amendment is minor in nature (i.e., it does not constitute a substantial change in management, it meets Code requirements, it will adequately manage and conserve the forest and range resource, and it will not affect the public in a material way). Refer to Appendix 1 for a sample amendment form.

Crown Range Developments

This section is to guide the district manager or designate in planning, authorizing, implementing, and maintaining Crown range developments to ensure Code compliance. Additional requirements pertaining to this subject may be in provincial, regional or district policies and procedures.

Range developments include practices, structures, excavations, and constructed livestock trails intended for the management of rangeland or livestock.

Review

Development proposals may be generated by:

- range use plans
- range agreement holder applications
- resource agencies
- communities, clubs or individuals
- other plans

All development proposals are evaluated upon receipt by district range staff to ensure that they comply with the general planning requirements and restrictions for resource management zones, sensitive areas, landscape units and community watersheds. This review is to identify and reject proposals that may contravene the Code.

Referrals

Internal district referral

As a minimum, proposed developments should be referred to strategic planners in the district, to ensure that the proposal is consistent with higher- level plans, and to those individuals involved in developing or reviewing other operational plans.

Agency referrals

The Ministry of Environment, Lands and Parks is a referral agency for range development proposals. As a minimum, a referral should include a map detailing the location, a copy of, or reference to, the design specifications, and any other pertinent information gathered during the layout of the development. The normal 60-day referral time period applies.

Other affected parties

The district manager may refer the proposed development to individuals or groups likely to be affected or to have an interest in the proposal.

First Nations referrals

This process is under review.

Layout

Projects must be ground-located and mapped.

Authorization

All proposed developments require district manager consent before any construction or layout takes place. Along with this consent, specifications, revegetation requirements and maintenance responsibilities will normally be included.

Where the proposed development is part of the current range use plan, the district manager may waive further review and comments. Where the proposed development is not part of the current range use plan, the district manager may require a public review and referral process as previously outlined. See the Range Practices Regulation for details.

Maintenance responsibilities

The range agreement holder is responsible for maintenance of developments unless granted an exemption by the district manager. If more than one agreement holder is affected, the maintenance responsibility is normally pro-rated based on net authorized AUMs. As a minimum, fences should be checked prior to turnout and maintained to ensure that the fence provides the intended benefit.

Amendments

If the development is not identified/mapped in the current range use plan, the plan map should be updated showing its location. This would be done using the amendment form in Appendix 1, following the process set out in Section 43 of the *Forest Practices Code of British Columbia Act.*

Appendix 1

Range use plan template, amendment form and sample approval checklist

This template outlines the elements of range use plans as required by the *Forest Practices Code of British Columbia Act* and the Operational Planning Regulation.

If a range use plan includes *unfenced grazing land* (unfenced private land grazed in common with Crown range), only the grazing schedule applies to that private land. The district manager may approve a schedule for any time period, provided that stock control is adequate to prevent trespass on Crown range.

Range Use Plan

RUP #: _____

The district manager, pursuant to section 41 of the *Forest Practices Code of British Columbia Act,* has determined that this range use plan will adequately manage and conserve the forest resources of the agreement area.

The attached map is part of the range use plan.

This range use plan is associated with the following range agreement(s).

NAME:
ADDRESS:
TELEPHONE:

RANGE AGREEMENT #:
FILE #:
STOCK RANGE:
RANGE UNIT:

This range use plan expires on: _____
mm dd yy

Submitted by _____ on _____
Signature of range agreement holder mm dd yy

I hereby approve this range use plan.

This range use plan takes effect on: _____
mm dd yy

Approved by: _____ on _____
Signature of district manager mm dd yy

Range Use Plan for Livestock Grazing

A map (provided by the Ministry of Forests)

Measures to address strategies provided by the district manager relating to

(i) ungulate winter range

(ii) achieving biological diversity

(iii) protecting resource features and/or sensitive areas

(iv) achieving or maintaining properly functioning condition (PFC) in riparian areas

(v) achieving desired plant communities (DPCs) in areas that have been, or may be, significantly affected by livestock use

Current plant community	Desired plant community	Measures to achieve DPC

(vi) addressing known water quality objectives

(vii) minimizing damage to trees that are not free growing

(viii) Wildlife Habitat Areas

(ix) other strategies required to adequately manage and conserve the resource for the plan area

Grazing schedule

Pasture name	*No. of livestock*	*AUMs*	*Period of use*	*Key areas as given*	*Range readiness criteria*	*Average stubble height at end of period*	*Browse use levels*

note any unfenced private land grazed in common with Crown range

Other comments specific to success of the plan

These may include comments on other uses and how they affect the plan holder's ability to manage the rangeland.

Range Use Plan for Hay cutting

A map of the area (provided by the Ministry of Forests)

Area to be harvested (as mapped)	*Desired plant community*	*Measures*	*Date of harvest*	*Range readiness criteria*	*Average stubble height at end of period*

Range use plan amendment form

RUP#: _____

The attached amendment to the range use plan is submitted pursuant to Section _____ of the _____ .

Submitted by _____ on _____
Signature of range agreement holder mm dd yy

This range use plan amendment is associated with the following range agreement.

NAME:
ADDRESS:
TELEPHONE:

RANGE AGREEMENT #:
FILE #:
STOCK RANGE:
RANGE UNIT:

The district manager, pursuant to section 41 of the *Forest Practices Code of British Columbia Act*, has determined that this Range Use Plan Amendment: 1) meets the requirements of the *Forest Practices Code of British Columbia Act*, and its regulations and standards; 2) will adequately manage and conserve the forest resources of the agreement area; and 3) does not affect the public in a material way.

I hereby approve this range use plan amendment.

Approved by:_____ on _____
Signature of district manager mm dd yy

Range use plan approval checklist

Article	Included	N/A	Comments
Map showing:			
Agreement boundaries			
Community watershed boundaries			
Ungulate winter range			
Wildlife habitat areas			
Range developments			
Resource features that might be affected by livestock use			
Wildlife habitat features			
Streams, wetlands, lakes			
Recreational facilities			
Research installations			
Domestic water intakes			
Snow courses			
Cultural heritage features			
Known sensitive areas			
Key areas			
Plantations			
Measures to address d.m. strategies			
Ungulate winter range			
Biological diversity			
Resource features and/or sensitive areas			
PFC in riparian areas			
Achieving desired plant communities			
Water quality objectives			
Trees not free growing			
Other			
Grazing schedule for all plan areas			
Livestock class, numbers and AUMs			
Periods of use			
Unfenced private land			
Key areas			
Range readiness criteria			
Average stubble heights			
Browse use levels			
Advertised			
Referrals			
Review and comment			
Responses to referrals/comments			

Prepared by: _____ District manager's initials:_____

Appendix 2

A template of information provided by the district manager to the agreement holder

Note: This information is not part of the plan but should be kept on file

_____ **AGREEMENT AREA**

1. Map

2. Plant communities and key areas

These are plant communities that have been, or may be, significantly affected by livestock use. Key areas are portions of a range agreement area selected because of their value as a monitoring site for grazing use.

Pasture name	*Current plant community*	*Desired plant community*	*Key areas*	*Range readiness criteria*	*Average stubble height at end of period*	*Browse use levels*

note any unfenced private land grazed in common with Crown range

3. Resource features (including streams, wetlands or lakes), sensitive areas and riparian areas that may be negatively affected by livestock use including:

(i) Riparian areas and features that are non-functional or at risk.

(ii) Wildlife habitat features

(iii) Other

4. District manager–supplied objectives and strategies

Goal	Objective	Strategies
A viable wild ungulate population	Ungulate winter range	
A healthy, natural ecosystem	Biological diversity	
A healthy, natural ecosystem	Resource features and sensitive areas	
A healthy functioning watershed with intact riparian plant communities	Properly functioning condition in riparian areas	
A healthy natural ecosystem	Desired plant communities	
Clean drinking water	Water quality objectives	
A viable forest industry	Free growing conditions on newly planted cutblocks	
Prevention of wildlife extirpation	Wildlife habitat areas or general measures	
Other		

Appendix 3

A sample range use plan

Process:

1. The district manager provides the following information to the agreement holder:
   - a map
   - strategies as required by regulation
   - descriptions of key areas along with readiness criteria, stubble heights and browse utilization levels
   - descriptions of resource features and sensitive areas likely to be affected by livestock use
   - descriptions of current and desired plant communities for areas likely to be affected by livestock use
2. The agreement holder incorporates district manager information into the plan and also includes a grazing schedule and measures to address the strategies supplied by the district manager.
3. The plan is advertised and referred.
4. The agreement holder finalizes changes to the plan and submits it to the district manager for approval.
5. Ministry of Forests staff review the plan and complete the checklist.
6. The district manager reviews the plan and approves it if it adequately manages the resource.

Approval Checklist for XYZ Ranch Range Use Plan

Article	Included	N/A	Comments
Map showing:			
Agreement boundaries	X		
Community watershed boundaries		X	
Ungulate winter range	X		
Wildlife habitat areas		X	
Range developments	X		
Resource features that might be affected by livestock use			
Wildlife habitat features	X		
Streams, wetlands, lakes	X		
Recreational facilities		X	
Research installations		X	
Domestic water intakes		X	
Snow courses		X	
Cultural heritage features		X	
Known sensitive areas		X	
Key areas	X		
Plantations	X		
Measures to address d.m. strategies			
Ungulate winter range	X		
Biological diversity	X		
Resource features and/or sensitive areas	X		
PFC in riparian areas	X		
Achieving desired plant communities	X		
Water quality objectives		X	
Trees not free growing	X		
Grazing schedule for all plan area			
Livestock class, numbers and AUMs	X		
Periods of use	X		
Unfenced private land		X	
Key areas			
Range readiness criteria	X		
Average stubble height	X		
Browse use levels	X		
Advertised	X		
Referrals	X		
Review and comment	X		
Responses to referrals/comments	X		

Prepared by: _____ District manager's initials:_____

Range Use Plan

RUP #: 001 XYZ RANCH

The district manager, pursuant to section 41 of the *Forest Practices Code of British Columbia Act*, has determined that this range use plan will adequately manage and conserve the forest resources of the agreement area.

This range use plan is associated with the following range agreement.

NAME: J. P. Rancher
ADDRESS: Box 7, Slow Creek
TELEPHONE: (250) 555-0000

RANGE AGREEMENT #: 675
FILE #: 2000-01
STOCK RANGE: River Range
RANGE UNIT: Spring Fire

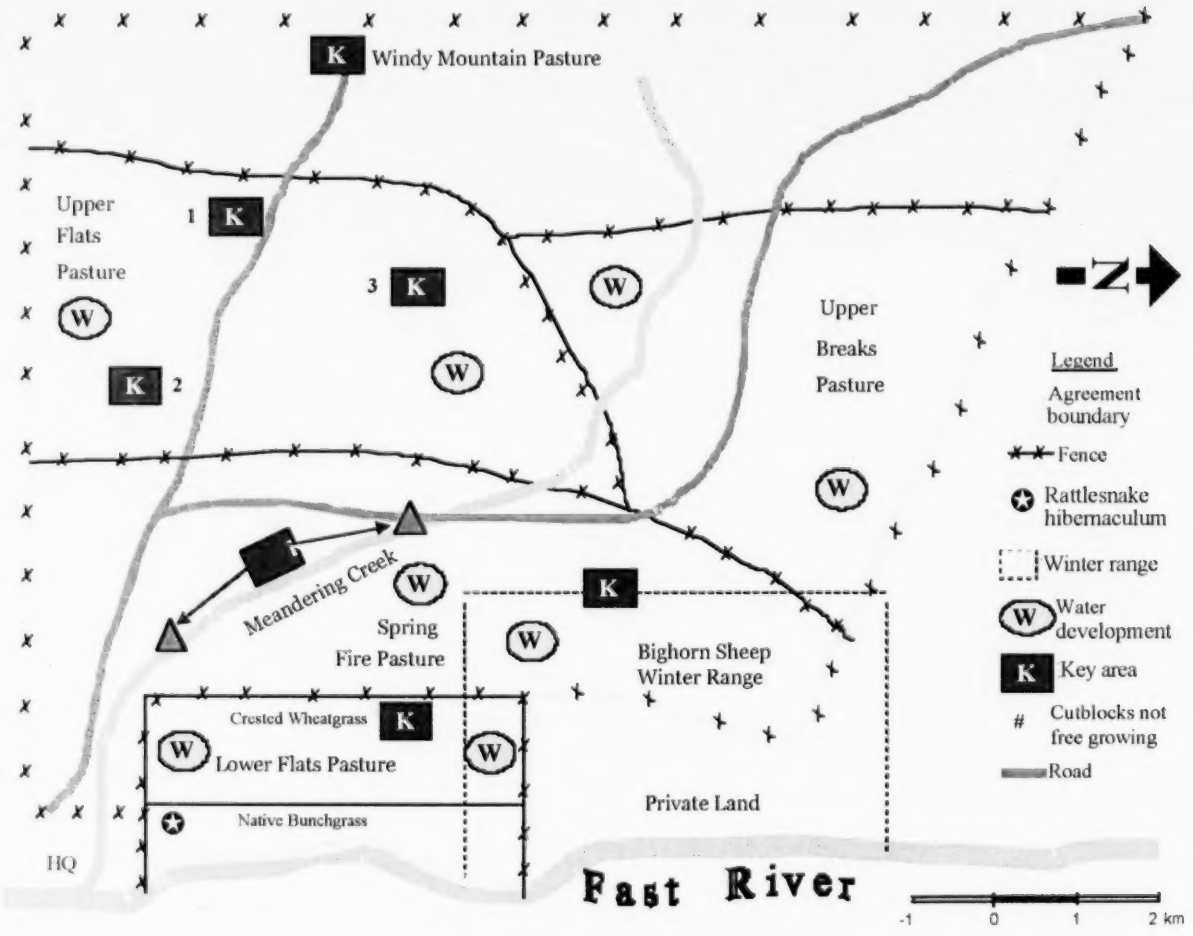
Submitted by _____ on _____
Signature of agreement holder mm dd yy

This range use plan takes effect on: _____
mm dd yy

This range use plan expires on: _____
mm dd yy

Approved by:_____ on _____
Signature of district manager mm dd yy

Map


K Windy Mountain Pasture
Upper Flats Pasture
1
K
3
K
W
K 2
W
W
Upper Breaks Pasture
N
Legend
Agreement boundary
Fence
Rattlesnake hibernaculum
Winter range
W Water development
K Key area
Cutblocks not free growing
Road
Meandering Creek
W
Spring Fire Pasture
K
W
Bighorn Sheep Winter Range
Crested Wheatgrass
K
W
Lower Flats Pasture
W
Native Bunchgrass
Private Land
HQ
East River
-1
0
1
2 km

Measures to address strategies provided by the district manager

Strategies relating to	Measures
Ungulate winter range for California bighorn sheep as mapped in Lower Flats and Spring Fire areas	• Follow the grazing schedule and stocking rate prescribed • Graze native bunchgrass range from June 1 to June 30 in order to allow forage plants to regrow • Distribute livestock use uniformly by active herding in order to remove decadent old grass growth
Biological diversity	• Graze native bunchgrass between June 1 and June 30 • Allow understorey plants to regrow prior to fall • Follow the grazing schedule and use level prescribed • Revegetate any disturbed sites within 3 years
Resource feature/sensitive areas. There is a rattle-snake hibernaculum in the Lower Flats area.	• A 100 m drift fence will be constructed to exclude cattle from the immediate vicinity of the site. This is shown on the attached map.
PFC in riparian areas – Spring Fire	• Livestock use will occur when soils are dried to point where they are not susceptible trampling and compaction • Livestock use will occur prior to mid-July in order to prevent browsing of willow shoots • Livestock will be removed from the riparian portion of the unit when the average stubble height in the key area reaches 8 cm • Livestock will be distributed by daily herding and by placement of salt blocks. Salt blocks will be placed no closer than 400 m from the riparian area • Two off-stream water sites will be developed at kms 3 and 5 of Meandering Creek
Plant communities in areas negatively affected by livestock. These are noted in the grazing schedule.	• Follow the prescribed grazing schedule and levels of use Will not exceed 15 % use of current year's browse in key areas
Water quality objectives – None exist for this area	• Not applicable
Trees not free growing	• Will not salt within 400 m of plantations • Remove livestock from the unit when a stubble height of 8 cm is reached or prior to Sept. 15
Wildlife habitat areas – None in this area	• Not applicable

Grazing schedule

Pasture name	*No. of livestock by class*	*AUMs*	*Period of use*	*Key areas as mapped*	*Range readiness criteria*	*Average stubble height at end of period; Maximum % browse use*	*Current plant community*	*Desired plant community*
Lower Flats	100 cow/calf pairs 4 bulls	100 4	May 1 to May 31	Seeded	Crested wheatgrass at 4.0 leaf stage (10 cm) Soils dried so grass plants not easily uprooted and tram-pling will not occur	5 cm 15% browse	Crested wheatgrass	same
Spring Fire	50 cow/calf pairs	50	June 1 to June 30	Open burn area	Bluebunch wheatgrass at 4.5 leaf stage Soils dried so grass plants not easily uprooted and trampling will not occur	12 cm on bluebunch 7 cm on bluegrass 15% browse	Early seral community of open Douglas-fir, bluegrass, pinegrass and some bluebunch wheatgrass	Late seral community of open Douglas-fir forest, bluebunch wheatgrass Rocky mtn fescue
Upper Breaks	50 cow/calf pairs	50	June 1 to June 30	None	Soils dried so grass plants not easily uprooted and trampling will not occur	8 cm 15% browse	Lodgepole pine forest with pinegrass	Same
Windy Mountain	50 cow/calf pairs	35	July 1 to July 21	Sub-alpine	Soils dried so grass plants not easily uprooted and trampling will not occur	8 cm 15% browse	Kobresia, Rocky mountain fescue and willow	Same

Pasture name	*No. of livestock by class*	*AUMs*	*Period of use*	*Key areas as mapped*	*Range readiness criteria*	*Average stubble height at end of period; Maximum % browse use*	*Current plant community*	*Desired plant community*
Upper Flats	50 cow/calf pairs 50 cow/calf pairs	125 90	July 1 to Sept. 15 July 22 to Sept. 15	Cutblocks	Soils dried so grass plants not easily uprooted and trampling will not occur	8 cm 15% browse	Cutblocks with lodgepole pine, pinegrass fireweed and brome	Same

The district manager has provided the following information to the agreement holder. It will be retained on file at the Ministry of Forests district office

XYZ Ranch Agreement Area

1. Map

2. Plant communities and key areas

These are plant communities that have been, or may be, significantly affected by livestock use. Key areas are portions of a range agreement area selected because of their value as a monitoring site for grazing use.

Pasture name	*Current plant community*	*Desired plant community*	*Key areas as mapped*	*Range readiness criteria*	*Average stubble height at end of period*	*Maximum % browse use*
Lower Flats	Crested wheatgrass	Same	Seeded	Leaf stage of 4.0 (10 cm) Soils dried so grass plants not easily uprooted and trampling will not occur	5 cm	15%
Spring Fire	Early seral community of open Douglas-fir, bluegrass, pinegrass and some bluebunch wheatgrass	Late seral community of open Douglas-fir forest, bluebunch wheatgrass, Rocky mtn. fescue	Open burn area	Bluebunch wheatgrass at 4.5 leaf stage Soils dried so grass plants not easily uprooted and trampling will not occur	12 cm on bluebunch 7 cm on bluegrass	15%
Upper Breaks	Lodgepole pine forest with pinegrass	Same	None	Soils dried so grass plants not easily uprooted and trampling will not occur	8 cm	15%

Pasture name	*Current plant community*	*Desired plant community*	*Key areas as mapped*	*Range readiness criteria*	*Average stubble height at end of period*	*Maximum % browse use*
Upper Flats	Cutblocks with lodgepole pine, pinegrass, fireweed, and brome	Same	Cutblocks	Soils dried so grass plants not easily uprooted and trampling will not occur	8 cm	15%
Windy Mountain	Open sub-alpine area dominated by Kobresia, Rocky Mountain fescue and willow	Same	Sub-alpine meadow	Soils dried so grass plants not easily uprooted and trampling will not occur	8 cm	15%

3. Resource features (including streams, wetlands or lakes), sensitive areas and riparian areas that may be negatively affected by livestock use

(i) Riparian areas and features that are non-functional or at risk. Portions of Slow Creek and its adjacent riparian area within the Spring Fire area have received heavy use and are rated as highly at risk. The attached function checklist shows the specific reaches and concerns.

(ii) There is a rattlesnake hibernaculum in the Lower Flats area. This areas needs to be protected from cattle use during the spring dispersal period.

Streams Riparian Function Checklist

Range Unit: Windy Mountain Range Agreement Holder: XYZ Ranch
Range Agreement Number:

UTM Coordinates: BEC Subzone:

Name of Stream: Meandering Creek

Date: Aug 21/00 Segment/Reach ID: beaver dam to road Gradient of Segment: Low (Medium) or High

Stream type: (Perennial), Intermittent or Ephemeral (Continuous) or Interrupted

Observers: R.J. Ranger

Yes	No	N/A	
			Channel Structure, Function and Diversity
X			Channel characteristics (rocks, large woody debris) and associated floodplain (access to overflow areas) are adequate to dissipate energy.
X			Channel and banks are relatively stable.
	X		Lateral movement is associated with natural sinuosity.
	X		The segment is vertically stable.
	X		Erosion, deposition and movement of bed materials are normal for this reach.
	X		Bank shearing, soil compaction and bare ground are uncommon.
	X		Sinuosity, width/depth ratio, gradient, pool/riffle ratio, and other aspects of channel geometry are in balance with the landscape setting (e.g., landform, geology).
	X		Inputs of organic debris from adjacent riparian area and subsequent incorporation into the channel are normal for area.
	X		Banks are undercut.
	X		Riffle bed materials and gravels are free of sediment. Fish spawning and use of rock undersides by insects and other invertebrates are possible.
			Flow Regime
X			Flow rates and timing remain unchanged over time (i.e., perennial to intermittent or ephemeral; continuous to interrupted).
			Biotic Community
	X		Roots of trees, shrubs, and grasses extend into the stream. Root masses are capable of withstanding high streamflow events and allowing formation of overhanging banks.
	X +		The plant community exhibits high vigour and indicates maintenance of riparian soil moisture characteristics.
	X		Occurrences of trampling, rubbing or browsing are uncommon.
	X		Riparian plant communities are an adequate source of replacement woody debris, both now and in the foreseeable future.
	X		A diversity of vertebrate and invertebrate life is evident.
			Nutrient Inputs and Water Quality
X			Nutrient levels are normal (there is a lack of algae mats and organism die-offs and there is a good aquatic organism diversity).
X			Inputs of fine organic matter are appropriate (leaves, small branches, and twigs).

Check one:
PFC
At risk X
Non-functional

Notes: Is the desired plant community present (diversity -- species, comp., age classes, structure, form)? No
Does the substrate make this stream susceptible to either (vertical) or lateral erosion? Yes
Soils types and textures? medium Are riparian soils subjected to prolonged saturation and anaerobic conditions? No
Is the stream beaver controlled? Yes Is the stream (effluent) or influent?
Have land uses altered the dynamics of the system? Yes

+ Sedge community and associated grasses vigorous, however, K. bluegrass borders sedge, implying drying or narrowing.
Lack of willows
Kentucky bluegrass

4. District manager–supplied objectives and strategies

Goal	Objective	Strategy
• A viable California bighorn sheep population within the unit	• Maintain the functional integrity of California bighorn sheep winter range as outlined on the map • Maintain an adequate fall standing crop of forage	• Use livestock to pre-condition forage on open grassland units • Open grasslands are to have a fall standing crop of bluebunch wheatgrass in excess of 20 cm
• A healthy, natural ecosystem	• Maintain a natural level of biological diversity • Maintain a perennial bunchgrass community in the open range area, natural stand structure and layers in the open forested community, and natural linkages (prevent unnatural cover breaks) • Maintain a healthy sub-alpine plant community on Windy Mountain	• Manage livestock by controlling the timing, level and distribution of use • Through a combination of grazing, chemical and biological control methods, limit the spread of noxious weeds. Advise the Ministry of Forests of any new infestations. • Revegetate soils disturbed during construction of range developments within 3 years
• A healthy, natural ecosystem	• Maintain and protect resource features/sensitive areas	• Restore any damaged resource features within 10 years through livestock management and range developments • Protect the natural salt-lick in the Lower Flats area

Goal	Objective	Strategy
• A healthy functioning watershed with intact riparian plant communities	• Maintain or achieve properly functioning condition in riparian areas	• Manage livestock use and implement range developments so that damaged stream and riparian sections are restored to properly functioning conditions (PFC) within 10 years • Manage livestock use and implement range developments to restore a dense corridor of willow through natural recruitment along Slow Creek within 15 years • Manage livestock use and implement range developments to maintain stable soils and streambanks • Manage livestock use and implement range developments to prevent an accumulation of faecal material within the riparian area • Reduce livestock watering from creek
• A healthy natural ecosystem	• DPCs as outlined in part 2 above	• Manage livestock use so as to achieve DPCs within 15 years
• Clean drinking water	• No objectives exist	• No issues
• A viable forest industry	• Achieve free growing conditions on newly planted cutblocks	• Manage livestock grazing to remove competing grass and forb growth from plantations • Manage livestock to limit trampling and browsing of conifer seedlings
• Prevention of wildlife extirpation	• No WHAs in area	• No issues